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Peru

Biotechnology

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Report Highlights:

Peru's biotech promotion law is still pending, but is expected to be reviewed this fall. In addition, the International Potato Center (CIP) in Peru recently developed a biotech potato resistant to the potato moth.

Includes PSD Changes: No
Includes Trade Matrix: No
Annual Report
Lima [PE1]
[PE]

Section I: EXECUTIVE SUMMARY

The government of Peru supports the use, research and production of biotechnologically-engineered products. However, the Peruvian Congress has not been able to discuss or approve Proposed Law N°12033, called "Law to Promote de Use of Modern Biotechnology in Peru". Committee changes and other political priorities have not allowed Congress to vote on this project. The proposed law establishes that biotechnology and its applications are fundamental factors in improving Peru's competitiveness in the agricultural sector and economic development. This law should be discussed by the Peruvian Congress in September of this year.

The government regulates the biotechnology framework of the country through the Science and Technology Commission (CONCYTEC), which is an entity within the Ministry of the Presidency. The ministries of Health, Agriculture, as well as the vice-ministry of Fisheries are responsible for regulating all biotechnology-related issues in their respective sectors. The Biosafety Law (27104) issued in 1999 established the National Environment Committee (CONAM) as the authority for overseeing safety issues concerning biotech products. Peru has also established the National Committee of Biological Diversity (CONABID), which is a forum to discuss all biotechnology issues. This body is composed of all government regulating agencies with an interest in biotechnology, private sector, universities and international organizations such as the International Potato Center (CIP).

Peru has signed and ratified the Cartagena Biosafety Protocol; however, it is now looking to establish a law that promotes biotechnology and maintains environmental health. Peru's position on this subject has changed as the country has recognized the significant benefits of biotechnology and has begun to develop regulation and procedures to promote the use of this technology. In fact, Peru plans to establish a National Biotechnology Center to link research and trade of biotech products. The most prominent issue regarding biotechnology is labeling.

U.S. trade interests lie mainly in the Peruvian agricultural poultry and livestock industries that demand U.S. corn and soybean meal. Peruvian agricultural exports, such as papaya and mangos, could potentially benefit from biotechnology as well. Crops for local consumption, such as corn, potatoes and cotton also have tremendous potential for benefiting from biotechnology.

Biotechnology is not well-known by the general public in Peru. Capacity building and outreach activities have been, and are continuing to be, executed by the Post, to inform and create awareness among government officials and the private sector of the benefits of biotechnology. In FY 2007, these activities will include sponsoring GOP officials' attendance of international forums on biotechnology, support the biotechnology public awareness survey, host biotech seminars with U.S. speakers and assist Peru in organizing the biotech conference under Asia-Pacific Economic Cooperation (APEC).

Section II: BIOTECHNOLOGY TRADE AND PRODUCTION

While Peru does not commercially produce any biotechnology crops, the International Potato Center (CIP - Centro Internacional de la Papa) in Lima, Peru announced in early July that it had developed a genetically modified potato engineered to repel the potato moth. The potato tuber moth (*Phthorimaea operculella*) is the main cause behind the decimation of warehoused potato stocks throughout Peru (and throughout many other countries as well). At present, Peruvian farmers use vast quantities of pesticides to control the moth, which places their health and the environment's health at risk, according to a 2006 CIP study.

The CIP transferred a gene to confer resistance to the moth into the Revolution potato variety, which is naturally sterile, hence allaying fears of genes unintentionally flowing into native potato varieties. Specifically, the CIP transferred the Bt gene (which produces a toxin similar to that produced by the *Bacillus thuringiensis* bacterium) into the potato, now known as Revolution (Bt). However, this potato will not yet be released into the Peruvian market because the Peruvian government has not yet adopted regulations governing the application of agricultural biotechnology.

Peru imports specific biotechnology crops, including soybeans and corn from the U.S. and Argentina. Peruvians recognize soybeans as a major source of protein and the only vegetable with complete protein. In Peru a variety of soybeans are used for consumption or processing into oil.

Peru receives food aid through the United States Department of Agriculture (USDA) Title I program and the U.S. Agency of International Development (USAID) Title II food program. The food aid program began in Peru during the 1950s and has remained in effect, targeting the areas of the country most affected by malnutrition. The main imports under Peru's Title II program are soybean products. Peru is now classified by the World Bank as a lower middle-income country and USAID's food aid program will therefore phase out by 2008. Having exceeded income levels and health statistics required for U.S. food assistance, Peru no longer qualifies for the program. Soybean-based oils will no longer be part of the food aid program but will be sold directly to the Peruvian market. USDA's Title I program has switched from wheat, which has been the only commodity monetized in the last six years, to soybean meal.

Section III: BIOTECHNOLOGY POLICY

Peru has decided to embrace biotechnology as a venue for development. Proposed law N°12033, called "Law to Promote de Use of Modern Biotechnology in Peru," is waiting to be discussed in the Peruvian Congress. This law has a completely different approach to biotechnology from previous ones. Instead of referring to the risks of biotechnology and how to prevent them, this proposed law talks about promoting the use of biotechnology and aims at improving Peru's economic situation by taking advantage of the benefits of biotechnology. The proposed law stresses the importance of strengthening scientific capabilities, educating

the population and establishing a transparent regulatory framework for biotechnological issues. This law also sees biotechnology as a means to improve the population's nutrition and health as well as food security. Finally, this proposed law encourages the creation of companies to provide biotechnological products and services.

The government regulates the biotechnology framework of the country through the Science and Technology Commission (CONCYTEC), which is an entity within the Ministry of the Presidency. The Ministry of Health, through the General Direction of Environmental Health (DIGESA); the Ministry of Agriculture, through the National Institute of Agricultural Research (INIA); and the Vice Ministry of Fisheries are responsible for regulating all biotechnology-related issues in their respective sectors. These entities must evaluate any safety risks regarding the use of biotechnology, as well as establish and monitor emergency plans in case of identified dangers.

According to the Biosafety Law issued in 1999 (Law N°27104), known as the Law for the Prevention of Risks Derived from the Use of Biotechnology, CONAM is the government entity responsible for all matters concerning biotechnology. The stated purpose of this law is to protect human health, environmental well-being and biodiversity, and to promote biotechnology research standards to reduce any possible risks during production. This law also established a counseling body, the National Committee of Biological Diversity (CONABID), that advises sector institutions (INIA, DIGESA and Vice Ministry of Fisheries) and proposes regulations to CONAM. CONABID is formed by a variety of government agencies such as the Animal and Plant Health Agency (SENASA), private sector, international organizations and universities.

In Peru there is a scattered, albeit unorganized, movement against biotechnology. This effort has mostly been led by environmental NGOs, which have been discouraging lawmakers and regulators from enacting laws promoting the use of agricultural biotechnology, arguing that they would endanger human health and biodiversity. This misconception often runs parallel to movements that promote organic farming. In Peru, organic farming is a long-term, expensive endeavor whose principal attraction is the reduced use of pesticides. However, Peruvian organic farming does not completely disregard biotechnology, as a minority of those involved actually recognize that genetically modified seeds can also be grown organically. As a rule, organic farmers in the Andes value natural Andean products and lack any knowledge of the benefits or uses of Genetically Modified Organisms (GMOs). These views are reinforced by local and international NGOs, who provide misleading, often distorted, information on biotechnology. Currently the general public is not engaged in the discussions about agricultural biotechnology.

A principal factor influencing regulatory decisions on biotechnology is that of Intellectual Property Rights (IPR). New developments in agricultural biotechnology will require an efficient and transparent IPR system. Producers interested in this area in Peru will require protection for their investment in certain genetically modified crops and natural resources. On the other hand, native communities or local governments will want rights over their natural resources, and expect to receive compensation (such as royalties) for the use of their

resources in biotechnology developments. An IPR system with either plant variety protection or patents would give the owner an exclusive right to their biotechnology crops from potential "copy competitors". With a good IPR system, Peru would benefit from protection of genetic resources used in production, thus safeguarding investment from abroad.

In Peru, there is no existing list of biotechnology crops approved for the environment or for food production. Peru does not allow field testing because INIA did not draft regulations required by the Biosafety Law 27104 "Prevention of Risks Derived from the Use of Biotechnology." CIP, however, is allowed to conduct research on genetically modified potatoes, and the INIA and CIP work closely together in the agricultural sector. The potato is a highly valued and diversified Andean agricultural product. To maintain its status as the premier international expert in its field, CIP has been allowed by INIA to conduct biotechnology research but not to commercially produce potatoes.

Labeling of genetically modified food is still under discussion. Peru is in the process of deciding if genetically modified products are to be labeled under the dietary source of the product. Peru changed its position on labeling from a restrictive perspective, which established the use of GMO in a product, to a more flexible view using wording such as "may contain GMO". Currently, Peru imports GMO soybeans and corn from the U.S. and Argentina that are not labeled.

Peru has signed and ratified the Biosafety Protocol but has not implemented it. Peru has found a way to interpret the Biosafety Protocol of 1999 to develop a law without contradicting the main regulations stated in the Protocol. The Law to Nationally Promote Biotechnology, which is currently in draft, will serve to expand biotechnology developments in Peru. This law requires regulation and promotion on scientific research, technology development and business innovation to increase economic benefits without disrupting human or environmental health. The Law calls for a National Biotechnology Plan that has already been written by the Science and Technology Commission (CONCYTEC) scientists. This Plan will prioritize crops and strategies to develop and use biotechnology products. Peru has a strong scientific community and the potential to develop into a biotechnology research country. Peruvian Universities and the CIP are examples of institutions that can contribute successfully to innovations in biotechnology.

Peru has neither biotechnology-related trade barriers nor does it have any pending legislation that will negatively affect U.S. exports.

Section IV: MARKETING

Labeling constitutes the principal marketing issue for agricultural biotechnology in Peru. If labeling is required and enforced based on consumers' rights, compliance will be a very expensive process for most companies. Labeling would have to include a verifiable description of production technique and all inputs to production. This topic raises questions such as:

- When is a product considered genetically modified? and,
- What constitutes the minimum requirement for a product to be genetically modified?

Regulations will require genetically modified crops to be labeled if there is a change in the composition of the product or if it was derived from genetically modified organisms. To date, the GOP has not made a decision whether labeling will be required for GMOs.

Section V: CAPACITY BUILDING AND OUTREACH

In Peru, US Government/USDA-funded capacity building and outreach activities relating to biotechnology with various purposes include:

- USDA's Agricultural Affairs Office in Lima works closely with CONCYTEC, providing contacts and information on biotechnology to develop the National Biotechnology Plan.
- AAO/Lima is funding a biotech public awareness survey to be used as a baseline by Peruvian authorities.
- AAO/Lima has made funds available to assist Peru in its organization efforts for APEC's biotechnology meeting.
- AAO/Lima has organized seminars on biotechnology for policy makers, leaders of agricultural industries, academia and congressmen. Seminars are used to raise awareness in the Peruvian government and private sector on the importance of developing agricultural biotechnology.
- AAO/Lima will also send the head of the Peruvian Science and Technology Institute (CONCYTEC) to a Cochran sponsored biotech course.
- USDA, through the CGIAR system, provides funds for CIP to carry out research, including biotechnology, on potatoes and other tubers.
- USDA has sponsored Peruvian officials to attend biotechnology-related forums. This includes both APEC and Codex meetings.